

### **In the Specification**

**Please replace paragraph [0022] with the following:**

[0022] In Figure 1B, an epitaxial Ge layer 104 is formed on top of the first semiconductor substrate 102. In one embodiment, the epitaxial Ge layer 104 has a surface with a roughness approximately greater than 2nm RMS. In another embodiment, the epitaxial Ge layer 104 has a surface with a roughness approximately greater than 4nm RMS. The epitaxial Ge layer 104 has a thickness 101 that may be less than 3000Å. In some embodiment, the epitaxial Ge layer 104 has a thickness 101 ranging from about 100-4000Å. The epitaxial Ge layer 104 can be formed using conventional methods such as chemical vapor deposition (CVD) or plasma enhanced [CVP] CVD as is known in the art. In one embodiment, a germanium gas source (e.g., germane) is floated over the substrate 102, which creates a gas phase reaction with the surface of the first semiconductor substrate 102. The epitaxial Ge layer 104 is formed on the surface of the first semiconductor substrate 102 as a result of the gas phase reaction.

**Please replace paragraph [0039] with the following:**

[0039] In Figure 2B, an epitaxial Ge layer 204 is formed on top of the first semiconductor substrate 202. In one embodiment, the epitaxial Ge layer 204 has a surface with a roughness approximately greater than 2nm RMS. In another embodiment, the epitaxial Ge layer 204 has a surface with a roughness approximately greater than 4nm RMS. The epitaxial Ge layer 204 has a thickness 201 that may be less than 3000Å. In some embodiment, the epitaxial Ge layer 204 has a thickness 201 ranging from about

100-4000Å. The epitaxial Ge layer 204 can be formed using conventional methods such as chemical vapor deposition (CVD) or plasma enhanced [CVP] CVD as is known in the art.

**Please replace paragraph [0048] with the following**

**[0048]** In **Figure 3B**, an epitaxial Ge layer 304 is formed on top of the first semiconductor substrate 302. In one embodiment, the epitaxial Ge layer 304 has a surface with a roughness approximately greater than 2nm RMS. In another embodiment, the epitaxial Ge layer 304 has a surface with a roughness approximately greater than 4nm RMS. The epitaxial Ge layer 304 has a thickness 301 that may be less than 3000Å. In some embodiment, the epitaxial Ge layer 304 has a thickness 301 ranging from about 100-4000Å. The epitaxial Ge layer 304 can be formed using conventional methods such as chemical vapor deposition (CVD) or plasma enhanced [CVP] CVD as is known in the art.